

Abstract of the Disclosure:

A filter module suitable for the filtering of electromagnetic waves includes a dielectric cylindrical resonator and one or more lines that supply or draw off electromagnetic waves to or from the dielectric resonator. The lines terminate in a contacting structure. The resonator has a variable separation from the lines, whereby the separations may be conceived in both the negative as well as alternatively in the positive longitudinal direction (z-axis) of the resonator. The transmitted signal power may be significantly increased in an advantageous manner relative to conventional coupling structures by means of the above. The above is particularly suitable for application in oscillator circuits with operating frequencies above 18 GHz, such as typically find increasing application in environment systems of a motor vehicle such as Lane Departure Warning (LDW), Blind Spot Detection (BSD) or Rear View Detection.